# Converting compatible units

6 questions | 14 marks

Equivalent correct methods earn the corresponding marks.

**1.** Convert 36 km/h to m/s. [2 marks]

$36 \div 3.6 = 10$.

**Answer:** 10 m/s.

**2.** Convert 15 m/s to km/h. [2 marks]

$15 \times 3.6 = 54$.

**Answer:** 54 km/h.

**3.** Convert 3.5 L/min to mL/min. [2 marks]

Each litre is 1,000 mL.

$3.5 \times 1000 = 3500$.

**Answer:** 3,500 mL/min.

**4.** Convert 240 cm/min to m/s. [3 marks]

240 cm is 2.4 m.

$2.4 \div 60 = 0.04$ m/s.

**Answer:** 0.04 m/s.

**5.** A food costs AUD 0.80 per 100 g. Find its cost per kilogram. [2 marks]

1 kg contains ten lots of 100 g.

$0.80 \times 10 = 8$.

**Answer:** AUD 8/kg.

**6.** A runner covers 2.7 km in 15 minutes. Find the average speed in m/s. [3 marks]

2.7 km is 2,700 m; 15 min is 900 s.

$2700 \div 900 = 3$.

**Answer:** 3 m/s.